# Common Core Standards - Resource Page

The resources below have been created to assist teachers' understanding and to aid instruction of this standard.

| Domain | **Standard:** 5.NF.4b - Find the area of a rectangle with fractional side lengths by tiling it with unit squares of the appropriate unit fraction side lengths, and show that the area is the same as would be found by multiplying the side lengths. Multiply fractional side lengths to find areas of rectangles, and represent fraction products as rectangular areas. |
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| **Number and Operations-Fractions**<br>**Apply and extend previous understandings of multiplication and division to multiply and divide fractions.** | Questions to Focus Learning<br>What is area and how do you find the area of a rectangle? How can this help you with multiplying fractions?<br><br>Having a concrete model of what multiplication looks like, and is a visual fraction model a student can create, can help solve future fraction multiplication problems.<br><br>Student Friendly Objectives<br>*Knowledge Targets*<br><br>I can recall that area is measuring the plane surface of a figure in squares.<br>I can recall when filling the area of a rectangle with squares, a rectangular array is created.<br>I can connect the relationship between area of a rectangle with rectangular arrays (length times width tells the amount of squares that fill the plane).<br>I can count up the tiles in a rectangle by set fractional increments to determine the area.<br><br>*Reasoning Targets*<br><br>I can imply the idea of square tiles being a fraction rather than one to create another type of visual fraction model.<br>I can interpret the relationship between the counted area and the multiplication equation with containing fractions.<br>I can define patterns in multiple areas and equations to create ways to solve multiplying fractions so the visual fraction model is not a strategy I will always need. |

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| | Vocabulary<br><br>area<br>arrays<br>fractional<br>length<br>square units<br>unit fractions<br>width<br><br>Teacher Tips<br><br>Vertical Progression<br><br>6.NS.1-1 - Interpret and compute quotients of fractions.<br>6.NS.1-2 - Solve word problems involving division of fractions by fractions, e.g., by using visual fraction models and equations to represent the problem. |

The above information and more can be accessed for free on the Wiki-Teacher website.
Direct link for this standard: 5.NF.4b